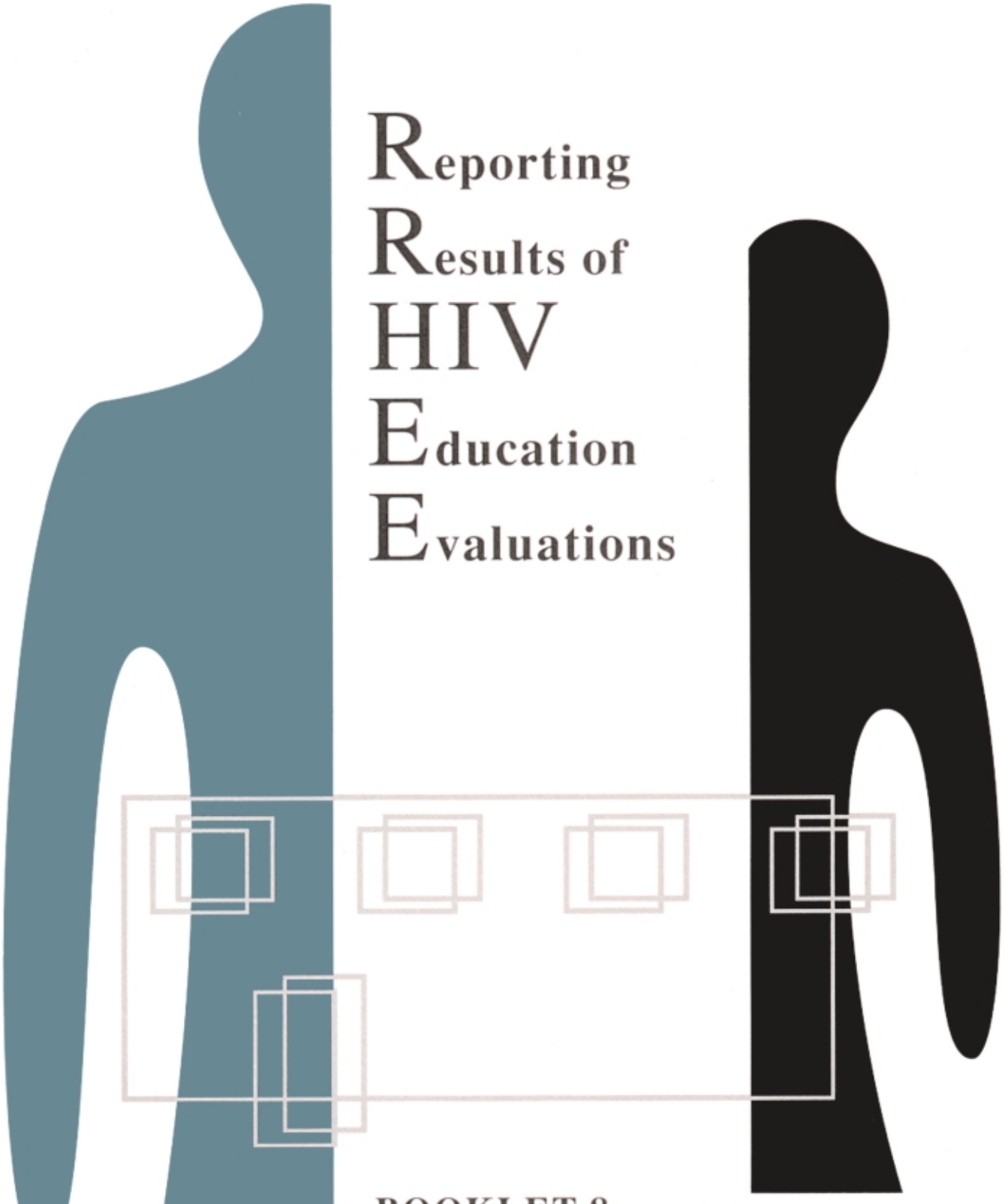
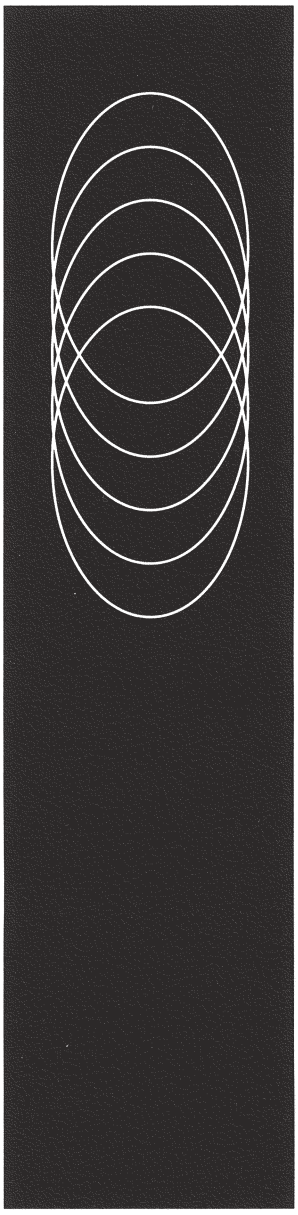


Reporting Results of HIV Education Evaluations

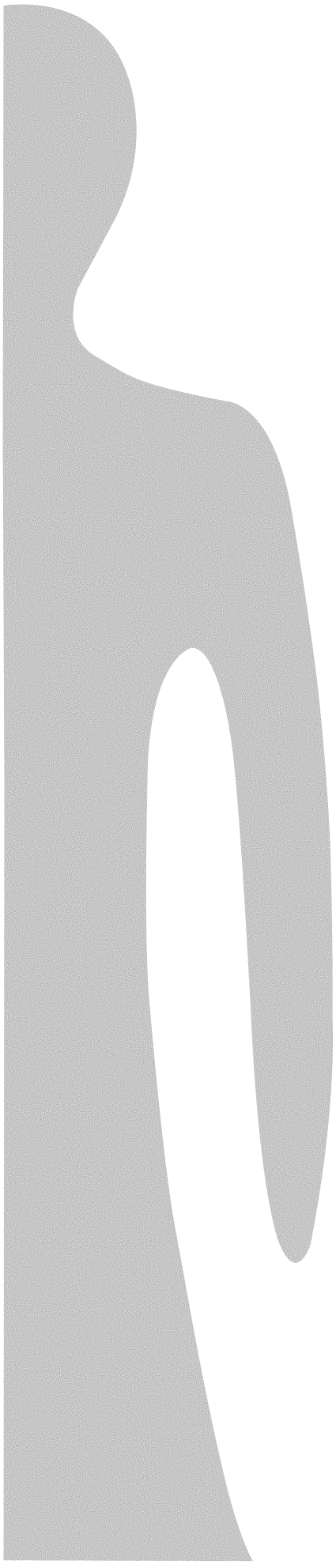
BOOKLET 8

DIVISION OF ADOLESCENT AND SCHOOL HEALTH
NATIONAL CENTER FOR CHRONIC DISEASE PREVENTION AND HEALTH PROMOTION
CENTERS FOR DISEASE CONTROL



Reporting Results of HIV Education Evaluations

W. James Popham



This booklet was prepared by IOX Assessment Associates under Contract No. 200-88-0683 with the Division of Adolescent and School Health, Centers for Disease Control. Preliminary draft: May 1992.

TABLE OF CONTENTS

Introduction

After an educational evaluation has been completed—the study designed, the data gathered, and the data analysis concluded—its results must be communicated to relevant decision makers. This booklet provides a set of five guidelines that will be useful to evaluators in preparing their reports. Also included are three sample reports that focus on different aspects of HIV education. Although these reports deal with the kinds of evaluative tasks evaluators of HIV education programs often face, all three are fictitious. They are not intended to describe "exemplary" evaluation studies but are included here to illustrate the five guidelines and to provide options for reporting the results of HIV education evaluation studies. Evaluators of HIV education should select only those segments of the reports that seem suitable to their particular studies of HIV education.

Five Report Preparation Guidelines

Based on the experiences of educational evaluators for well over two decades, the following five guidelines have been identified to assist you in your reporting efforts. Some of these reporting guidelines may be more relevant to you than others.

Guideline 1: Evaluation reports should be decision focused.

Maintain a decision focus.

Educational evaluation activities should provide information that will help program planners make better decisions. If your evaluation study deals chiefly with decisions to improve the program, then the report should be structured so that the relevance of your findings to those decisions is clear. For program-improvement evaluations, decision makers will typically be the HIV education program's instructional staff. If the evaluation study deals dominantly with a decision to continue or discontinue a program, then the report should be organized so that the decision makers will understand how the report's findings bear on their decision. For program-continuation evaluations, decision makers are likely to be school board, administrative, and grant agency personnel.

Evaluation reports are organized around fairly conventional sections. Two slightly different organizational structures are presented below:

Commonly Used Sections of Evaluation Reports

Style 1	Style 2
• Introduction • Procedures • Assessment Instruments • Data Analysis • Results • Discussion • Recommendations	• The Setting • Decisions at Issue • Program Description • Outcome Variables • Procedures • Findings • Discussion

Although a well-designed evaluation will be conducted to provide decision-relevant information to those making decisions about the program, an evaluator is sometimes tempted to include all of the data collected. However, an evaluation report should be concise and focused only on program-relevant decisions.

Guideline 2: Evaluation reports should be as brief as possible.

Keep reports brief.

This second guideline is really a corollary to the first guideline's focus on decisions. Regardless of whether you're providing a report on a program-continuation evaluation to a school district's governing board or a report on a program-improvement evaluation to health educators staffing an HIV education program, the recipients of your evaluation report are bound to be busy people. To get your report read and used, you'll typically have to make it brief enough so that a busy decision maker will be inclined to read it.

Staff members of state or federal legislators usually suggest that when a document exceeds one or two pages in length, the likelihood of its being read drops. In evaluation reporting, *less* is truly *more*. Thus, succinct reporting should be your goal when preparing an evaluation report. Eliminate the extraneous information and get to the heart of things.

It is impossible to define "brief" in terms of the numbers of pages in an evaluation report. A 25-page evaluation report might be considered brief for a major year-long study of a state's HIV education program. For an evaluation of a one-hour schoolwide assembly dealing with HIV risks, however, a 25-page evaluation report would most likely be considered lengthy. Be guided by the magnitude of the evaluation study itself, then try to be as succinct as is sensible in that situation.

Guideline 3: At least two levels of detail should be provided in all evaluation reports.

Provide at least two levels of detail.

This guideline, aimed at increasing the likelihood that an evaluation report will be used, urges evaluators to always provide two or more degrees of descriptive detail. Suppose, for example, that in accordance with Guidelines 1 and 2 you have prepared a lean, decision-focused evaluation report of eight pages. Your report is, by most standards, quite brief. Even so, you should introduce it with an executive summary of one page or less. Such summaries cut to the core of the study by including only the most important highlights. Creating an accurate and readable executive summary is a challenge, but, because decision makers will often read *only* an evaluation report's executive summary, it is worthwhile. The three sample evaluation reports provided later in this booklet are introduced by an executive summary.

More substantial evaluation studies, such as a lengthy study of HIV-focused staff development provided by a state department of education over a two-year period, may need three levels of reporting: (1) the evaluation report itself, (2) a one-page or executive summary, and (3) a separate technical supplement that describes the procedures, data analysis, and results in more detail. The length of this supplement might run to 40 pages or more. The decision to prepare a separate technical supplement usually depends on the magnitude of the evaluation study and, even more importantly, on the likelihood that decision makers will truly require this information.

One of the dividends of separating technical information into its own supplement is that the evaluator avoids including the potentially deflective information in the evaluation report itself. The brevity and focus of the report is maintained and the likelihood that it will be read is increased. Thus, with some exceptions,

using one of the reporting plans described below will usually prove satisfactory for evaluators of HIV education programs:

Concise Reporting	Customary Reporting	Complete Reporting
• A 1-2 page report	• An executive summary • A brief report	• An executive summary • A brief report • A technical supplement

Clearly, the purpose of multilevel reporting is to increase the probability that decision makers will attend to the results of your evaluation study.

Guideline 4: Evaluation reports should be as readable as possible.

One important way to strengthen the likelihood of your report's being read is to make it readable. Decision makers are less likely to read a dense, stiffly written 10-page document with no figures, tables, or white space than a well-written 10-page document that features attractive headings, reasonable white space, and several key tables and figures.

When you prepare your evaluation report, write directly to your particular audience. Use a writing style and a vocabulary that are at the same level as your audience's reading abilities, dispositions, and interests. Keep the writing direct and simple, and avoid complex terminology. You might want to hire a good editor who can help make the report easier to read and understand.

Keep it readable.

Use graphics and tables whenever possible. Many people will grasp your point more quickly by studying a well-conceived graphic than by reading a written explanation of the same information.

Use a variety of headings and subheadings to help the reader follow the report's sequence and see what's coming. Use white space along with the headings to break up the negative visual impact of an unending set of paragraphs. For lengthier reports, be sure to use a table of contents. In short, make the report visually appealing.

The essence of Guideline 4 is to increase the readability of an evaluation report so that it will actually be read. There are too many instances of important evaluation studies that never made an impact because the evaluators created documents that were uninviting to the reader.

Guideline 5: Offer to provide an oral report about the study.

Not all decision makers learn best from written reports; many prefer and will be more effectively informed by an oral presentation. An oral report will provide an opportunity for a question-and-answer period that can prove particularly illuminating to the decision makers.

Prepare an oral presentation.

If your offer to provide a supplementary oral report is accepted, you will need to prepare it with great care. Your oral report should incorporate each of the previous guidelines: (1) keep your remarks decision focused, (2) cut your presentation to the bone and practice it to make sure that it can be delivered well within your allotted time, (3) begin with a succinct oral "executive summary" of the report's results, and (4) enhance the visual appeal of your report through visual aids and a well-structured oral presentation.

Conclusion

The chief purpose of reporting results of HIV education evaluation studies is to present relevant information to those who must make decisions about the program involved. For the study's information to be used, however, it must be effectively communicated to decision makers. The art of effective evaluation reporting is thus the art of effective communicating.

Three Sample Evaluation Reports

The following three sample evaluation reports exemplify the five guidelines. Because they are only examples, some of these reports are shorter than they might be in a real situation. Nonetheless, as suggested in Guideline 2, brevity in reporting is a desirable attribute. Each of the three reports is introduced by a short description to set it in context.

The reports included here should not be considered prescriptive in any sense; rather, they contain different ways of reporting evaluation studies to those who will use the results. The first report describes an evaluation of a district-level HIV program's impact on students. The second report deals with a state department of education's staff-development activities on HIV. The third report evaluates a proposed new HIV education curriculum prior to its installation in a school district.

In the three sample reports, you'll see several different kinds of page layouts that are available to users of personal computer word-processing programs. Organize what's on a page so that it will entice the reader. Look to examples beyond those supplied in this booklet to get more ideas about what to put in your evaluation reports.

Sample Report Number One: Evaluating a District HIV/AIDS Education Program

This report summarizes the findings from an evaluation of a new HIV/AIDS prevention program in a fictitious school system. The "Metro City School District" was the site of an evaluation of a state-of-the-art, 15-hour program that was offered during required tenth grade social studies classes.

The Metro City School District is quite large (20 high schools with an average enrollment of 1,500 students) and has a five-member Research and Evaluation Office. At the request of the Board of Education, the district superintendent directed the Research and Evaluation Office staff to introduce a sound, theory-based, and tested HIV/AIDS prevention program into all district high schools. The first step in this process involved evaluating the effectiveness of the selected program with a sample of the district's high school students.

The following report was prepared at the conclusion of the evaluation study by the Research and Evaluation Office. In a memorandum accompanying the report, members of the office offered to make a supplementary oral report to the superintendent and/or the board of education.

Effectiveness of the Metro City School District HIV/AIDS Prevention Program

A Report to the Superintendent

by the
Research and Evaluation Office
Metro City School District

July 1991

TABLE OF CONTENTS

Page

EXECUTIVE SUMMARY

During the 1990-91 academic year, the Research and Evaluation Office conducted an evaluation of a state-of-the-art HIV/AIDS education program, prior to adopting it for districtwide implementation. Twelve schools were randomly selected to take part in the study, and half of these were randomly assigned to treatment. The curriculum was offered during required tenth grade social studies classes. No differences were found at pretest between the treatment and control groups. At posttest, however, the curriculum had a significant impact on students' certainty in their correctly held HIV-knowledge and confidence in their ability to resist HIV-related peer pressure. Further, the curriculum had a positive impact on reported HIV risk-behaviors; significantly more sexually abstinent students at posttest continued to refrain from sexual intercourse in the treatment group than in the control group, and significantly more sexually active students used condoms at last intercourse in the treatment than in the control group. It is strongly recommended that the HIV/AIDS Prevention Program (HAPP) be implemented as soon as possible in tenth grade social studies classes throughout the district. Three additional recommendations are included which could make this program even more effective: (1) provide support for teachers who have questions or concerns during intervention implementation, (2) provide, in other areas of the high school curricula, enhanced skill-building opportunities for students to resist peer pressure to engage in risky behaviors, and (3) increase emphasis on the debilitating effects of alcohol and drug use which impair judgment and increase the likelihood of participation in high-risk behaviors.

INTRODUCTION

During the 1990-91 academic year, a new 15-hour HIV/AIDS Prevention Program (HAPP) was evaluated in a randomly selected group of tenth grade classes in the Metro City School District (MCSD). The curriculum was offered during required social studies classes. To account for maturation effects, control classes were included in the study design. A decision will soon be made whether to install the curriculum districtwide for the 1991-92 academic year. This report describes the evaluation, presents the results, and provides recommendations regarding use of the curriculum.

The HIV/AIDS Prevention Program

The new curriculum is a state-of-the-art, 15-hour program designed to provide students with the functional knowledge, attitudes, and interpersonal skills necessary to help them avoid HIV-risk situations. HAPP provides numerous opportunities for students to practice interpersonal and refusal skills during structured role-play situations.

METHOD

A two-group (treatment versus control) design was employed to evaluate HAPP. All 20 of the district's high schools were willing to participate in the study. To meet sample size requirements, it was decided that a random sample of six treatment schools and six control schools would be included in the study, and that two classes from each school would be used. Because schools varied in their demographic characteristics, 10 matched pairs were formed based on location, size, and racial/ethnic composition. Six pairs of schools were randomly selected by drawing from a hat containing the 10 paired names. One school from each pair was assigned to the treatment condition and the other to the control condition by the flip of a coin. Two tenth grade social studies classes were randomly selected at each participating school. Thus, within the experimental group 12 classes received HAPP, and within the control group 12 classes received the typical social studies curriculum. In all, 622 students took part in the study.

All 12 tenth grade social studies teachers in the treatment schools took part in a five-day staff development session during August 1990. An evaluation report on the quality of the teacher training is on file in the district office.

An important aspect of the evaluation study involved examining the degree to which MCSD tenth grade social studies teachers in the treatment classes properly implemented HAPP. A brief questionnaire was distributed to teachers in the treatment classes which focused on (1) the degree to which each of the lessons was taught as planned, (2) any unforeseen issues or problems that arose, and (3) the teacher's confidence in teaching the material.

ASSESSMENT INSTRUMENTS

Three assessment instruments were used to pretest and posttest all students in both the treatment and the control classes. Students received the instruments prior to curriculum implementation and three months following implementation. All three instruments were drawn from a collection of measuring devices distributed by the Centers for Disease Control (CDC)*. Copies of all three instruments are available in the MCSD Research and Evaluation Office.

Knowledge of HIV and AIDS. This 15-item inventory is available in two equivalent forms. Form A was used as the pretest and Form B was used as the posttest.

How Confident Are You? This 10-item instrument assesses students' confidence in their ability to resist peer pressure. Five of the instrument's items deal with the kinds of pressures associated with HIV-risk behaviors.

Your Behavior. This 5-item inventory was abbreviated from a longer instrument distributed by CDC. Five questions focusing on students' HIV-related behaviors were selected for the version of the instrument used in this evaluation. Students' responses to these questions are recorded in a way that ensures anonymity.

In addition to these instruments, all teachers in the treatment condition completed questionnaires, as previously described, to examine whether the curriculum was implemented as planned and to help identify barriers to successful implementation.

RESULTS

All students in both the treatment and control classes completed the three assessment instruments in September 1990 and again in April 1991. Following the pretest, treatment and

*Centers for Disease Control, Division of Adolescent and School Health, *Assessment Instruments for Measuring Student Outcomes: Grades 7-12*, Atlanta, Georgia, 1992.

control students were described demographically. Chi-square tests for categorical data were used to determine whether the randomly selected groups were statistically different.

Chi-square tests and *t*-tests were also used to examine whether students in the treatment group differed significantly from those in the control group on the basis of pretest scores.

Finally, treatment and control groups were compared on their posttest scores in the areas of knowledge, confidence in resisting peer pressure, and HIV-related behaviors. Results from these analyses are provided below.

Demographics

Demographic characteristics considered important in this study were school location (urban versus suburban), school size, student gender, and student race/ethnicity. Chi-square tests were performed to determine whether the treatment and control groups were significantly different on any of these features. As shown in Table 1, groups were similar on all relevant characteristics.

Knowledge

Students were asked to respond to a series of 15 statements by indicating for each statement either "I am sure it's true," "I think it's true," "'I don't know," "I think it's false," or "I am sure it's false." The instrument was scored in two ways. First, students' responses were considered correct or incorrect according to whether they accurately identified statements as true or false. These knowledge-only scores can range from a low of 0 to a high of 15. Second, students' certainty in correctly held knowledge was calculated for each item using a 5-point scale. Total certainty scores can range from a low of 15 to a high of 75. In Figure 1, these two scores are presented as the percentage of possible points that can be earned. Thus, if a student earned 12 of 15 possible knowledge points, that student was given a knowledge "percent possible" score of 80. If that same student earned 45 of 75 possible certainty points, the student would receive a certainty "percent possible" score of 60.

At pretest, no significant differences were shown between the treatment and control groups on knowledge-only scores or on the certainty-in-knowledge scores. Because the treatment and control groups were comparable at pretest, posttest scores were used to examine the effects of the curriculum.

Table 1.
Demographic Distributions
by Treatment and Control Conditions

	Treatment	Control	Chi-square
School Location			
Urban	66%	59%	
Suburban	33%	41%	3.234
School Size			
<1,000 students	36%	42%	
>1,000 students	64%	58%	2.284
Gender			
Male	49%	49%	
Female	51%	51%	-----*
Ethnicity			
Asian	10%	6%	
Black	36%	33%	
Hispanic	18%	22%	
White	32%	33%	
Other	4%	6%	1.476

* With identical data, statistical tests could not be computed.

At posttest, differences between the treatment and control students were not statistically significant for the knowledge-only scores. However, a statistical difference was found between the groups on the certainty-in-knowledge scores (t = 3.527, d.f. = 598, p. = 0.002). Figure 1 shows the percent possible posttest scores for treatment and control groups on the knowledge-only and certainty-in-knowledge measures.

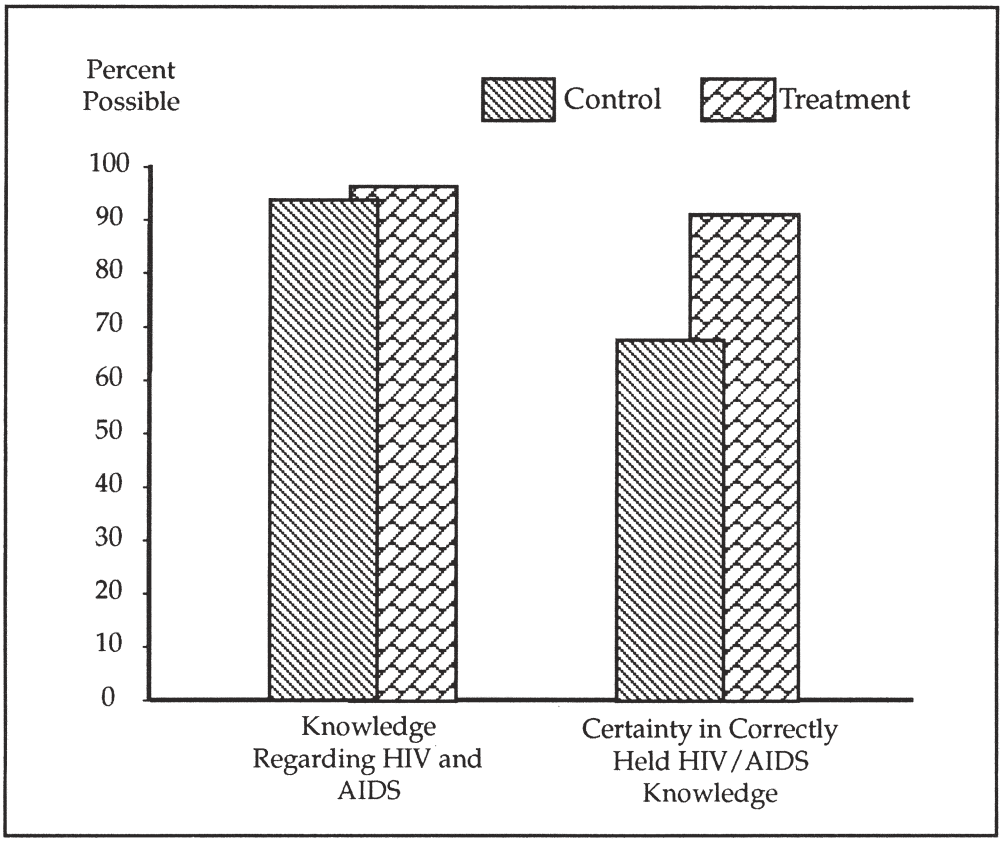


Figure 1. Mean posttest performance for treatment and control groups on knowledge items

Confidence in Resisting Peer Pressure

On this measure, students respond to 10 vignettes dealing with peer-pressure situations by indicating their degree of confidence in avoiding risk behaviors. Items are scored on a 5-point scale from "Completely Confident" to "Not at all Confident." Total scores can range from 10 to 50. In addition to the total score, two 5-item subscores were formed, one to examine general peer pressure and one to examine peer pressure specific to HIV-risk behaviors. Each subscore can range in value from 5 to 25.

At pretest, no significant differences were shown between the treatment and control groups on their total confidence scores or on either of the two subscores.

At posttest, statistical differences were found between the treatment and control groups in their overall confidence (t = 5.846, d.f. = 598, p. = 0.0001). While no differences were found on the general peer pressure subscale, treatment students showed greater confidence than control students in the area of HIV-risk-related peer pressure (t = 8.624, d.f. = 598, p. = 0.00001). Posttest results are presented graphically in Figure 2.

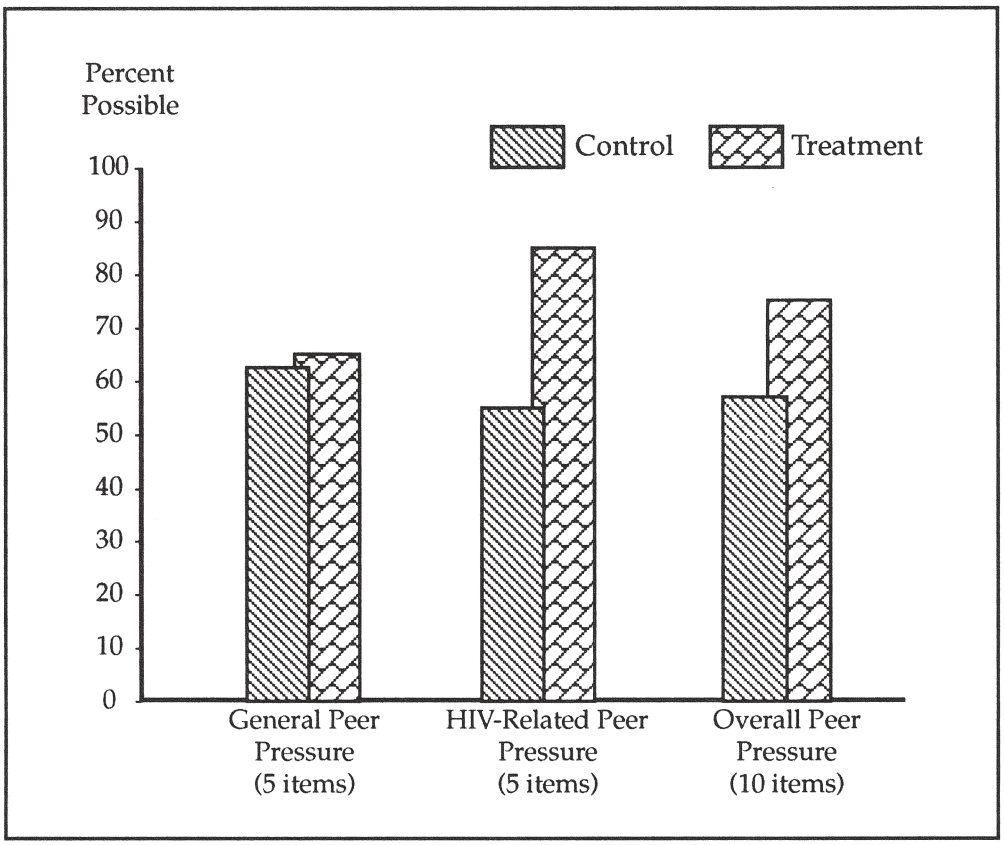


Figure 2. Mean posttest performance for treatment and control groups on confidence in resisting general and HIV-related peer pressure

HIV-Risk Behaviors

The five behavior items shown in Table 2 were used to examine differences among treatment and control students at pretest and posttest. No significant differences were shown between the two groups on any of the behavior items at pretest. However, at posttest, some significant differences were noted.

Table 2.
Mean Posttest Responses for Treatment
and Control Groups on HIV-Risk Behaviors

				Chi-Square
All Students:				
Have you ever had sexual intercourse?				
Control	n = 322	No = 42%	Yes = 58%	
Treatment	n = 300	No = 55%	Yes = 45%	10.622*
Have you injected drugs during the past 30 days?				
Control	n = 322	No = 96%	Yes = 4%	
Treatment	n = 300	No = 98%	Yes = 2%	0.651
Students who were sexually active at posttest:				
The last time you had sex, did you use a condom?				
Control	n = 187	No = 65%	Yes = 35%	
Treatment	n = 135	No = 42%	Yes = 58%	16.774*
During the past 30 days, with how many persons have you had sex?				
Control	n = 187	None = 35%		
		1 = 48%		
		2 = 13%		
		3 or more = 4%		
Treatment	n = 135	None = 37%		
		1 = 51%		
		2 = 7%		
		3 or more = 3%		2.860
The last time you had sex, did you drink alcohol or use drugs?				
Control	n = 187	No = 69%	Yes = 31%	
Treatment	n = 135	No = 72%	Yes = 28%	0.603

* $p<0.01$

At posttest, a significantly greater proportion of treatment students continued to refrain from sexual intercourse than control students. Specifically, 55 percent of treatment students had not initiated intercourse at the time of the posttest, compared to 42 percent of control students. A separate analysis was conducted for students who reported having been sexually active during their lifetime. Among this group, significantly more treatment students (58 percent) than control students (35 percent) reported condom use at last intercourse. No differences between groups were found for sexually active students in reported number of sexual partners during the past 30 days or use of alcohol or drugs at last intercourse. Finally, no differences were shown between treatment and control groups in injected drug use during the past 30 days.

Delivery of the HIV/AIDS Prevention Program

Teachers' responses to the implementation questionnaire indicate that HAPP lessons were presented essentially as they were designed. One of the teachers indicated that it was impossible to complete the curriculum in the time allotted, and two indicated serious concerns about their ability to adequately address sensitive issues. These three respondents noted that it would have been helpful to have someone to consult with during the intervention period.

DISCUSSION AND RECOMMENDATIONS

Conclusions

HAPP has been found to be successful in increasing students' certainty in their correct knowledge about HIV/AIDS and confidence in resisting HIV-related peer pressure. The curriculum also showed a positive impact on students' HIV-related behavior including (1) delay of sexual intercourse by students who were not sexually active at the pretest, and (2) increased condom use at last intercourse for sexually active students.

No significant differences were found between treatment and control groups in knowledge-only scores. This can be attributed, in part, to the fact that both groups had quite high knowledge scores at pretest. No significant differences were found in confidence in resisting general peer pressure, in the number of sexual partners in the past 30 days, or in alcohol or drug use at last intercourse. Finally, no significant differences were found in injected drug use during the past 30 days. This finding is not surprising given that very few students in either the treatment or control group were involved in injecting drugs.

Recommendations

It is recommended that HAPP be implemented as soon as possible in tenth grade social studies classes throughout the district. Three additional recommendations are provided that may help to make this program even more effective:

Recommendation 1: *Provide support for teachers who have questions or concerns during intervention delivery.*

Recommendation 2: *Provide, across a range of subject areas, skill-building opportunities for students to resist general peer pressure to engage in risk behaviors.*

Recommendation 3: *Increase emphasis on the debilitating effects of alcohol and drug use because they impair judgment and increase the likelihood of participation in risk behaviors.*

Sample Report Number Two: Evaluating a State HIV Staff Development Program

This second report appraises a fictitious statewide staff development program for 500 teachers who will be responsible for providing HIV education in their school districts.

The "State X" Board of Education has a standing policy that major new educational programs in the state be subjected to a two-stage evaluation process. First, an improvement-focused evaluation is to be conducted. After several years, a continuation-focused evaluation is to be carried out to help decide whether the program should remain in existence. The following report describes the improvement-focused evaluation of ten two-day workshop sessions intended to provide State X's teachers with the skills and knowledge needed to effectively teach an HIV education program.

An Evaluation of the HIV Staff Development Workshop Provided by the State X Department of Education

A Report to the State X Board of Education

by the
Evaluation Division
of the
State X Department of Education

January 1992

TABLE OF CONTENTS

EXECUTIVE SUMMARY

The Evaluation Division conducted an improvement-focused evaluation of ten 1991 statewide sessions of the HIV/AIDS Education Workshop. Before and after the two-day sessions, a total of nearly 500 teachers completed four evaluation instruments. An analysis of the results indicated that the workshop substantially increased teachers' knowledge about HIV and their confidence regarding the teaching of HIV-related topics. Little or no improvement was seen, however, in teachers' comfort in discussing sensitive topics or in their acceptance of people with AIDS/HIV. On a separate postworkshop evaluation sheet, participants gave the workshop an overall grade of B+ and offered several suggestions to improve it. During in-person interviews, the workshop's five-member instructional team also offered constructive criticism.

The Evaluation Division recommends that (1) the segment on sensitive topics be revised after members of the instructional staff receive formal instruction on that topic, (2) more systematic instruction be devoted to improving participants' attitudes toward persons who have HIV/AIDS, (3) experienced peer educators take part in the peer-education segment of the workshop, (4) trainers be reduced from five to two, and (5) an additional year of improvement-focused evaluation be followed by an evaluation to see if the workshop should continue to be offered.

INTRODUCTION

This report was prepared by the Evaluation Division of the State X Department of Education (SDE) in keeping with established policies of the State X Board of Education. The report describes a study designed to evaluate a series of SDE-sponsored workshops for teachers charged with delivering HIV education in their school districts. The evaluation study was formatively oriented—that is, intended chiefly to improve the quality of the workshops in anticipation of their being offered in subsequent years by SDE to other teachers. Accordingly, although the report is officially being submitted to the state board, an important audience for the report is the five-person SDE team that designed and offered the workshops.

The HIV/AIDS Education Workshop

The HIV/AIDS Education Workshop is a two-day session developed during late 1990 and early 1991 by a five-member team from the SDE Health and Guidance Division. In planning the content of the workshop, the SDE staff relied heavily on a needs-assessment survey that SDE had sent in early 1990 to a representative sample of 200 teachers in the state. The workshop was offered for the first time during late September and October of 1991 at ten geographically dispersed sites throughout the state. The workshops were offered either on a Monday-Tuesday or a Thursday-Friday. School districts near the workshop sites were invited to send a specified number of teachers (2-10), depending on the size of the district. Approximately 50 teachers attended each two-day workshop. The workshop instructors were the five SDE staff members originally responsible for creating the workshop.

Workshop Particulars

Each of the two workshop days lasts from 8:30 am until 4:30 pm. The agenda for each of the two days is provided below. Brief recesses are taken throughout each day.

Day One	
Time	**Topic**
8:30 - 9:00	Pretest, Introductions, Workshop Overview
9:00 - 10:30	Essential Information about HIV and AIDS
10:30 - 12:00	Students' HIV-Risk Behaviors and How to Alter Them
1:00 - 2:30	Promoting Students' Realistic Risk Perceptions
2:30 - 3:30	How to Discuss Sensitive Topics
3:30 - 4:30	The Role of Peer Educators

Day Two	
Time	**Topic**
8:30 - 9:30	The Role of Interpersonal Skills in Reducing HIV Risk
9:30 - 12:00	How to Teach HIV-Related Interpersonal Skills
1:00 - 2:30	Providing Students with Generalizable Practice in Using Interpersonal Skills
2:30 - 3:30	Promoting Appropriate HIV-Related Attitudes
3:30 - 4:15	Evaluating Your Own HIV-Related Teaching
4:15 - 4:30	Posttest, Workshop Evaluation, Adjournment

An Improvement Focus

The evaluation study was designed to supply information that would result in the improvement of the HIV/AIDS Education Workshop. This report concludes with a series of specific suggestions for improving the two-day workshop sessions.

METHOD

Outcome Variables

Five assessment instruments were used in the evaluation study. Four of these were supplied by the Division of Adolescent and School Health of the Centers for Disease Control (CDC) in Atlanta, Georgia. The fifth instrument was a workshop-specific evaluation form. Each of these five instruments is briefly described below.

Knowledge. *Knowledge of HIV and AIDS* is a 25-item true-false inventory. It yields a number-correct score (ranging from a low of zero to a high of 25).

Instructional Confidence. *Instructional Confidence* is a 10-item inventory. Scores can range from a low of 10 to a high of 50.

Comfort in Discussing Sensitive Topics. *Comfort with Sensitive Topics* is a 10-item inventory measuring teachers' perceived ease in being able to talk about sensitive topics such as those associated with sexual practices or drug usage. Scores can range from a low of 10 to a high of 50.

Acceptance of People with HIV/AIDS. *Attitudes toward People with HIV or AIDS* is a 10-item inventory. Scores can range from a low of 10 (reflecting lesser acceptance of such individuals) to a high of 50 (reflecting greater acceptance of such individuals).

Workshop Evaluation Sheet. At the close of the two-day session, workshop participants were asked to anonymously complete this brief evaluation form. The three most important questions on the sheet asked participants to (1) assign a grade (A, B, C, D, or F) to the workshop, (2) describe the features of the workshop that should remain unchanged, and (3) describe the features of the workshop that should be modified.

Procedures

The evaluation used a modified pretest-posttest design. To conserve instructional time, workshop participants completed as a pretest either (1) the 25-item knowledge test or (2) the three 10-item inventories measuring instructional confidence, comfort in discussing sensitive topics, and acceptance of people with HIV/AIDS. As a posttest, participants completed the instrument(s) they had not completed as a pretest. All participants filled out the Workshop Evaluation Sheet at the end of the workshop.

In this type of item-sampling scheme, the mean performance of approximately half of the participants in any given workshop (for both pretest and posttest) represented the total group. In all, for the 10 sessions of the workshop, 496 teachers supplied pretest data and 478 teachers supplied posttest data.

In addition, separate half-hour interviews with each of the five workshop instructors were carried out by members of the SDE Evaluation Division during December 1991. The comments of the instructors figured into the recommendations that conclude this report.

Data Analysis

For the first four outcome variables—that is, all instruments but the Workshop Evaluation Sheet—an overall pretest mean and an overall posttest mean were computed from pretest and posttest means from each of the 10 workshop sessions. For ease of reporting, each of these overall means was transformed into a percentage of attainable points. In other words, if an instrument's highest possible score was 50 points, and the pretest mean for that instrument was 30 points, this pretest result was reported as 60 percent of the points potentially attainable on the instrument. Pretest and posttest percentages were then compared for each of the four outcome variables.

For the Workshop Evaluation Sheet, a simple summary of per-item responses was prepared. The mean overall grade assigned by participants was also computed.

FINDINGS

The Four CDC Instruments

As can be seen in Figure 1, participants made substantial pretest-to-posttest gains in their knowledge about HIV/AIDS (pretest: 65%, posttest: 93%) and in their confidence about teaching their students about HIV and AIDS (pretest: 59%, posttest: 78%). On the other hand,

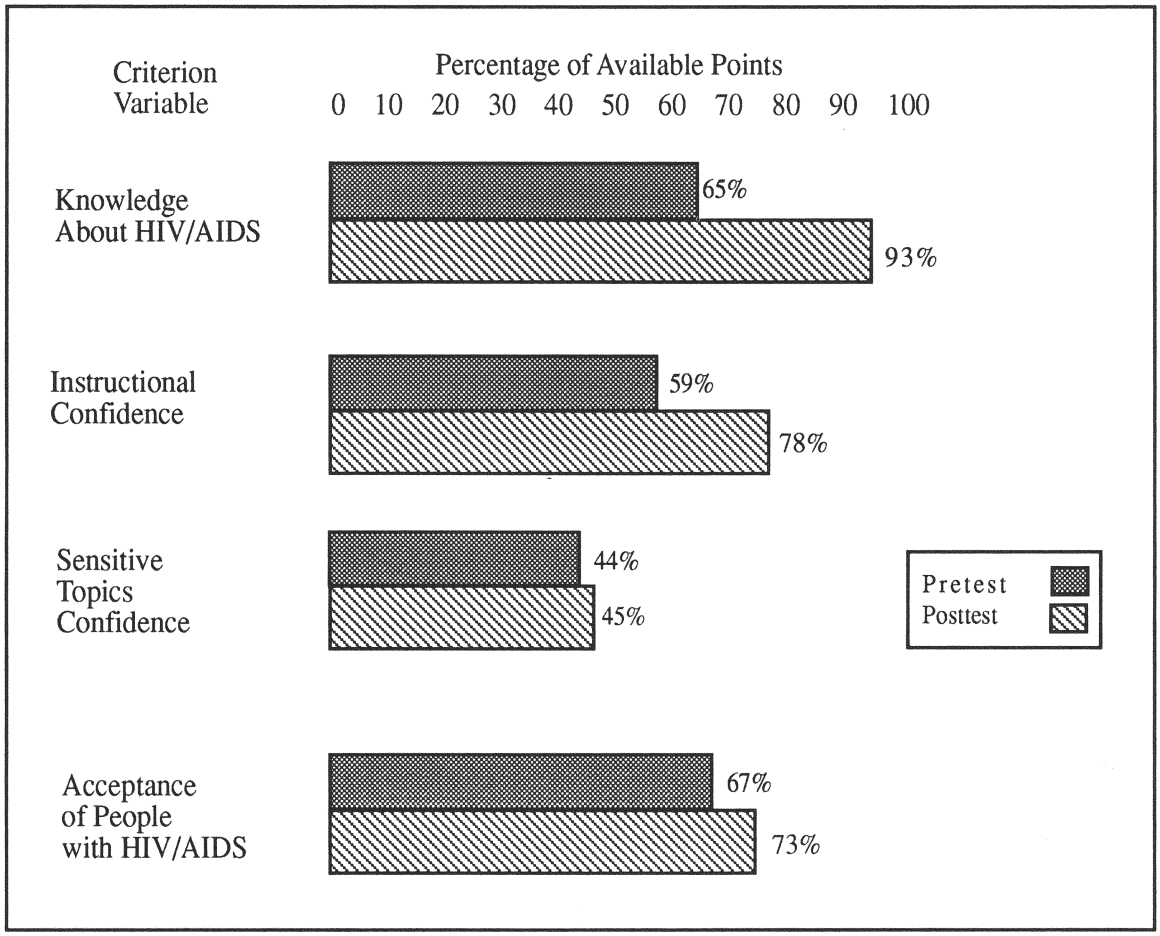


Figure 1. Overall pretest and posttest mean performances of workshop participants on four assessment instruments used in the evaluation study.

participants gained essentially no confidence in discussing sensitive topics (pretest: 44%, posttest: 45%). Although participants became somewhat more accepting of persons who have AIDS or who are infected with HIV, this gain was modest (pretest: 67%, posttest: 73%).

The Workshop Evaluation Sheet

An average grade of B+ was assigned to the workshop by the 476 teachers who responded to that item on the Workshop Evaluation Sheet. Three aspects of the workshop were endorsed by more than half of the respondents (the percentage of respondents supplying each of the reactions is given in parentheses):

- the second-day emphases on interpersonal skills (63%)
- the small number of workshop participants and the instructional staff's use of subgroup activities (58%)
- the first-day session dealing with how to promote more realistic HIV-risk perceptions among students (52%).

These reactions were *generated* by participants (as opposed to being *selected* from options on the Workshop Evaluation Sheet).

Two suggestions for improvement were cited by more than 50 percent of the participants. Sixty-four percent of the participants called for a complete revision of the one-hour segment dealing with the discussion of sensitive topics. Almost two-thirds of the participants believed that the trainers were embarrassed by the discussion of these sensitive topics. Fifty-seven percent of the participants believed that the segment dealing with peer educators was ineffective; many of these participants suggested that students who had served as peer educators should take part in this segment of the workshop.

Staff Interviews

The half-hour interviews with each of the five members of the instructional team indicated that the staff adheres quite closely to the lesson plans originally devised for the workshop. Three of the five staff members believed that the session could be effectively staffed by only two instructors per workshop; tying up five staff members for the early part of a school year seemed unwarranted to them. All of the instructors sensed that their treatment of sensitive topics was

inadequate, but they were unable to suggest specific solutions. Four of the five instructors were particularly pleased with the workshop's strong emphasis on interpersonal skills. All five instructors thought that the session dealing with the promotion of more realistic HIV-risk perceptions among students was highly effective.

DISCUSSION

Overall, the HIV/AIDS Education Workshop appears to prepare the state's teachers to deliver HIV education effectively. The teachers who took part in the evaluation were generally positive about the workshop and made meaningful pretest-to-posttest gains in their knowledge about HIV/AIDS and in their confidence in teaching their students about HIV/AIDS.

Given that the workshop has only been offered one time statewide, it is not surprising that the workshop can be improved and made even more effective.

RECOMMENDATIONS

1. *After the instructional staff is trained to discuss sensitive topics more comfortably, that segment of the workshop should be significantly revised.*

   Rationale: An analysis of several data sources suggests that this segment of the workshop is weaker than it should be. The instructional staff will apparently benefit from outside training in this area. Following the training, this segment should be altered to provide participants with first-hand experience in dealing with sensitive topics.

2. *More instructional attention should be given to participants' acceptance of people who have AIDS or who are infected with HIV.*

   Rationale: Currently, this topic seems to receive no formal instructional attention. Most of the trainers appeared to believe that participants would naturally become more accepting of people with AIDS/HIV during the workshop. Attitudinal modification, however, typically requires a systematic and sometimes sustained instructional effort. Consultation with an attitudinal education specialist may help improve this aspect of the workshop.

Sample Report Number Three: Evaluating a District's Proposed Curriculum for HIV Education

The following sample report focuses on the curriculum of a recently developed HIV education program in the "Richfield County Schools," a fictitious midsize rural school district. The district's health educators and curriculum specialists have worked hard to create the new program, meeting twice a month for more than a year. The bulk of the new program is to be provided as a special two-week instructional unit near the middle of a one-semester health education course currently required of tenth grade students. In addition, a two-day knowledge-focused unit dealing with HIV is to be provided to the district's seventh grade students as part of their required physical education course.

Because this new HIV education curriculum represents a substantial increase in the number of instructional hours devoted by the district to HIV, the district's school board members unanimously agreed to a resolution requesting the district superintendent to secure an independent evaluation of the new curriculum ***before*** *installing it on a districtwide basis. Several board members, although recognizing the importance of expanded HIV-related instruction in district schools, expressed some reservations about the content of the new curriculum.*

The district superintendent contracted two professors from a nearby state university to carry out the curriculum evaluation. Both professors reviewed the written materials associated with the new program and conducted a lengthy question-and-answer session with the ten-person planning committee that created the curriculum. Several follow-up interviews with key members of the committee were also conducted by one or both of the professors. The report on the following pages was submitted to the superintendent, on schedule, six weeks after the two professors were contracted.

An Evaluation of the Proposed HIV Education Curriculum of the Richfield County Schools

A Report to the
Richfield County Schools
Board of Education

by
Maria A. Rodriguez
and
Steven E. Brown
College of Education
Brookhurst State University

May 1991

TABLE OF CONTENTS

Page

SYNOPSIS

A proposed HIV curriculum for the Richfield County Schools was reviewed on the basis of seven factors considered important in the quality of such programs. In essence, the curriculum was evaluated on the basis of its internal characteristics. On five of the seven criteria employed, the curriculum was considered strong. On one criterion the curriculum was judged average and on a final criterion the curriculum was judged to be weak. Six program-specific recommendations conclude the report.

INTRODUCTION

During the fall semester of 1989, health educators in the Richfield County Schools committed themselves to developing a new, more powerful instructional program to combat the rapidly expanding AIDS epidemic both in the state and, based on recent health statistics, in Richfield County. From November 1989 until January 1991, a districtwide committee met approximately twice a month to create a new HIV education curriculum for the district. Three of these meetings were also attended by a specially appointed advisory panel of non-educators including parents who assisted in the curriculum design. This new curriculum was presented by the committee to the district superintendent in January 1991 in a document entitled *HIV Education for the 1990s in Richfield County.*

During its February 1991 meeting, the Richfield County Board of Education requested that the proposed HIV education curriculum be evaluated prior to its installation in the county's schools. We were hired to supply such an evaluation.

The following two questions guided the evaluation of the proposed curriculum:

- *Should the proposed HIV education curriculum be adopted in the Richfield County Schools?*

- *If the curriculum is adopted, should it be installed as is or should it be modified?*

We organized our evaluation around a set of seven characteristics of appropriate HIV curricula for evaluating the effectiveness of an HIV education program. These characteristics are part of a set of guidelines distributed by the Centers for Disease Control in Atlanta, Georgia. We were also greatly aided by an extensive meeting with the planning committee that developed the new curriculum and by subsequent interviews with several committee members. We appreciate committee members' cooperation and candor.

The actual effectiveness of an HIV education program or, for that matter, any educational program, should be determined by the program's effects on students. Thus, if the proposed HIV education curriculum is adopted by the board, as proposed or with modifications, we strongly recommend that a systematic evaluation of the new program be carried out subsequently to ascertain its effects on the HIV-related behaviors of the students who receive the program.

The following curriculum review is based on the previously mentioned characteristics. We assume that readers of our report are familiar with the document describing the proposed curriculum (*HIV Education for the 1990s in Richfield County*).

APPRAISING THE CURRICULUM

Instructional Quality

This new curriculum, if it is to be successful, must be consistent with what is currently known about effective instruction. It is our view that the day-by-day series of lesson plans (provided in the descriptive materials accompanying the proposed curriculum) are remarkably consonant with current conceptions of effective instruction. The instructional objectives for each lesson are clearly formulated in terms of students' postinstruction behavior, knowledge, attitudes, or skills. Moreover, students are told the general thrust of each lesson at that lesson's outset. Numerous attempts are made to use students' prior relevant knowledge as a springboard for new concepts. The nature of explanations is generally clear and likely to be understood by tenth graders. Modeling—both by teachers and students—is effectively used throughout the lessons. Finally, frequent time is provided for student practice and is likely to be sufficient for the objectives involved. Overall, then, we regard the proposed HIV education program to be exemplary in its adherence to proven principles of instructional psychology. Although a proposed curriculum's impact on students cannot be predicted with any certainty, we believe that the new program is likely to be quite effective.

Functional Knowledge

An appropriate HIV education curriculum should provide information to students so that they gain the knowledge needed to avoid or reduce their risk of becoming infected with HIV. This knowledge is referred to as functional knowledge because it is likely to influence those student behaviors that are associated with HIV infection. In contrast to functional knowledge, we can think of HIV general knowledge as less personally relevant topics, such as how HIV was discovered or how severe the current HIV epidemic is in various parts of the world. An HIV education program likely to alter students' out-of-school behaviors emphasizes functional rather than general knowledge about HIV.

We found the tenth grade lessons to be solidly focused on functional knowledge, particularly the early lessons in the two-week unit, where there is an emphasis on HIV/AIDS information. The two seventh grade lessons, however, dealt far more with general than with functional HIV knowledge.

We believe that there should be a greater stress on functional HIV knowledge in the two seventh grade lessons. We should provide our young people with the information they need to

protect themselves. We urge the planning committee to increase the emphasis on HIV functional knowledge in the seventh grade lessons. Specifically, these lessons should provide more information about the behaviors students must adopt to reduce their risk of HIV infection. The chief behaviors of this sort are sexual abstinence, use of condoms for those who are sexually active, and avoidance of drug injection and needle sharing in connection with drugs and steroids.

Realistic Vulnerability Appraisals

A well-conceived HIV education program should help students perceive more accurately their own vulnerability to HIV infection. The proposed curriculum is exceptionally strong in this regard, devoting three well-designed lessons (including two excellent videotapes) to helping students recognize their risk of HIV infection.

Suitable Affective Dispositions

A properly designed HIV education program should promote positive attitudes toward methods of avoiding HIV-risk behaviors. For example, sexual abstinence is the most effective way of avoiding HIV infection. Students should be encouraged to believe that it is desirable for them to be sexually abstinent. Similarly, students who are sexually active should be convinced of the need to use condoms. Students should also be convinced of the dangers of injected drug use and needle sharing.

In our view, the affective dimensions of the new curriculum have been underemphasized. Rarely can one identify explicit segments of the lesson plans, either for seventh grade or tenth grade lessons, that directly address the promotion of student affect. There are, for example, no instructional objectives dealing specifically with attitudes in any of the lesson plans—a possible indicator that county teachers are not familiar with methods for modifying students' attitudes. Achieving attitudinal changes in students requires careful planning and appropriately focused instructional sequences. We are aware of several HIV-focused instructional videotapes, widely used in the U.S., that deal directly with attitudes of viewers. Such videotapes should be reviewed for their relevance and likely effectiveness.

We believe that the tenth grade unit should give more attention to modifying student attitudes. Teachers involved in the tenth grade lessons and, if possible, those providing the seventh grade lessons will probably need training in affective instructional procedures.

Interpersonal Skills

The report of the planning committee, *HIV Education for the 1990s in Richfield County*, clearly stresses the importance of skill promotion as a vehicle for modifying teenagers' out-of-school health-related behaviors. The proposed curriculum emphasizes "refusal skills" and "social negotiation skills" during the two-week tenth grade unit. Although we believe students need more opportunities to practice their refusal skills, the planning committee is to be commended for the strong emphasis on interpersonal skills in the proposed curriculum.

The only exception we noted in an otherwise excellent instructional design deals with strengthening students' refusal skills, a topic addressed in the curriculum's second week. The amount of practice that students are given to sharpen their refusal skills is quite brief. As we understand current plans, a typical student actually practices his or her refusal skills for less than 30 minutes. Yet, members of the planning committee deem the promotion of refusal skills to be a particularly important aim of the new program.

Even if it means the addition of one or two more hours of instruction, we strongly recommend that students be given much more time to practice their refusal skills. Such refusal skills are vital to avoid HIV-risk behaviors. Sufficient practice in using refusal skills in response to varied forms of social pressure is clearly necessary.

Parent Involvement

A well-designed HIV education curriculum should provide concrete ways to involve parents/guardians in ensuring that their child avoids HIV infection. Parents/guardians can add substantially to the efforts of the school in encouraging their child to avoid HIV-risk behaviors. Because they are most concerned about the health and well-being of their child, parents/guardians are in the best position to discuss their values and expectations about the HIV education curriculum.

The proposed curriculum involves parents through homework assignments that correspond with the lessons. These assignments provide parents with information about HIV infection, as well as exercises to encourage parent-child communication about HIV prevention. We believe these homework assignments will help parents/guardians initiate HIV-related discussions with their child.

Adequate Duration

Effective HIV education programs ought to last long enough to achieve their objectives. The planning committee's proposal to expand the current tenth grade HIV curriculum from two hours to two weeks is clearly warranted.

We believe, based on our reading of relevant research studies, that high school seniors should receive a two- or three-hour "booster" session of HIV instruction. We urge the planning committee and the board to consider such supplemental instruction, perhaps offered in general assemblies for seniors or as part of required twelfth grade classes. In general, however, we thought that the duration of the instructional program was reasonable.

Summing Up

In review, using the seven CDC-supplied program characteristics, we arrived at the following curricular "report card" for the proposed HIV education program:

Criterion	Strong	Average	Weak
• Instructional Quality	✓		
• Functional Knowledge		✓	
• Realistic Vulnerability Appraisals	✓		
• Suitable Affective Dispositions			✓
• Interpersonal Skills	✓		
• Parent Involvement	✓		
• Adequate Duration	✓		

Overall, the proposed HIV education program is an exceptionally well-designed curriculum that appears to recognize not only current advances in health education and health knowledge but also sound thinking in the field of instructional psychology. We solidly support the proposed HIV education program.

RECOMMENDATIONS

To highlight the recommendations offered in the report, we have listed them separately below:

1. *The new HIV education curriculum should be adopted in Richfield County Schools and put to use as soon as possible.*

2. *Tenth grade students should have more opportunities to practice their refusal skills, even if this entails an extra two days of instruction.*

3. *Functional knowledge should be emphasized more than general knowledge in the seventh grade lessons.*

4. *More instructional time should be devoted to promoting appropriate HIV-related attitudes.*

5. *Participating teachers should be trained in affective instructional procedures.*

6. *The board should seriously consider adding a twelfth grade booster session of HIV instruction.*

In conclusion, we do not wish our recommendations to detract from what is a praiseworthy instructional design. The curriculum conceived by the planning committee addresses the HIV problem in Richfield County head on. The proposal should be accepted by the Richfield County Schools Board of Education.